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Application No. 10/657,707
Amendment dated July 14, 2005
Reply to Office Action of April 14, 2005

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Remarks/Arguments

Claims 1, 4 to 8 and 10 to 44 are pending in the application.

No new matter has been added by the amendments made herein, the details of which amendments are described further below.

Double Patenting

Claim 14 has been canceled, and claim 20, dependent therefrom, amended to depend from claim 24.

Claim Objections

Each of claims 1, 4, 5, 11, 14, 24 and 32 has been amended as suggested by the Examiner. Further, the term "wheel" in each of the last lines of claims 10 and 31 has been replaced by the term --gear-- in conformity with the corrections to claims 4, 5, 11, 14 and 32 as suggested by the Examiner.

Claim 10 has been amended to depend from claim 8.

Claim Rejections - 35 USC § 112, Second Paragraph

Claim 16 has been amended to depend from claim 10, which provides basis for the "resilient finger".

Claim 21 has been amended to depend from claim 6 to provide basis for the "first and second stops" of claim 23.

Claim Rejections - 35 USC § 102

Each of claims 1, 2 and 15 was rejected as being anticipated by United States Patent No. 6,698,805, "Erices et al".

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Claim 1 has been amended to include limitations of claims 2 and 3, and claims 2 and 3 have been canceled, rendering rejection of claim 1 moot. Claim 15 depends from claim 1, and includes all the limitations of amended claim 1.

Claim Rejections - 35 USC § 103

Claims 3 to 8, 10 to 14 and 20 to 34 were rejected as being unpatentable over Erices *et al.* in view of Ehret.

As set out below, the suggested combination does not provide all of the elements of Applicant's invention, and so a *prima facie* case of obviousness has not been established.

Applicant's Invention

All independent claims of the application are directed to a device for releasing a latch in which the device includes a worm gear biased against rotation by a spring connected between the gear and device housing such that energy is transferred from its motor to the spring as the gear rotates from a first to a second position and the energy stored in the spring causes the gear to rotate in a second direction when the motor is powered down.

Erices *et al.*

The action of April 14, 2005 states on page 5 that "the work gear is biased against the rotation from the first position to the second position" as described at column 3, lines 10 to 16 of Erices *et al.*

Column 3, lines 10 to 16 of Erices *et al.* states:

"Electric drive units are also known which work in only one direction of rotation, even if optionally reset by reversing under spring force, however, such devices have a degressive starting characteristic, therefore when starting they would first apply a high moment which as the lifting motion of the detent pawl continues is reduced incrementally or continuously as set forth in DE 41 19 703 C1."

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Here, Erices *et al.* are describing a prior art device, not their own device. This passage of Erices *et al.* indicates that they were aware of drive units that work in one direction and that such devices can be reset by reversing under spring force. A copy of DE 41 19 703 C1 is included with an Information Disclosure Statement to be submitted shortly by Applicant.

In the context of their own device, Erices *et al.* describe the use of "leg springs for pretensioning of the detent pawl lever 5" at column 6, lines 41 to 42. The pretensioned springs serve to hold the detent pawl lever in operable location against cam 9. In the arrangement of Erices *et al.*, biasing of its worm gear against or in favor of its direction of rotation depends upon the shape and position of the cam, and the direction of rotation of the gear. Because the purpose of the biasing in the Erices *et al.* device is to hold the pawl lever in location, the circumstances under which the worm gear is biased against rotation is merely incidental and is not required to depend upon the direction of rotation as in the case of Applicant's invention.

The Erices *et al.* device does not provide in any fashion a spring to which energy is transferred such that the spring causes the gear to reverse direction when the motor is powered down.

Ehret

The action of April 14, 2005 states on page 6 that Ehret describes "biasing a gear for a latch release device being provided by a helical spring (36) connected between a gear (34) and a housing (46)." This is incorrect.

Element 46 of Ehret is a spring stop fixed on driving element (gear) 28. Driving element 28 operates in one direction, counterclockwise in the sense of the figures of Ehret. Spring 36 serves to store energy that is released upon movement of lever arm 54 from the position it occupies in Figure 3 to that shown in Figure 4, which permits movement of driving disk 34 relative to driving element 28. Energy stored in the spring is also released when locking lever 48 moves from the position shown in Figure 6 back to the

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closed position of Figure 1, as described by Ehret at column 4, lines 45 to 55. Each of driving element 28 and driving disk 34 rotates on rotational axis 32 so that these elements along with spring stop 46 move with respect to the housing of the door lock of Ehret. As such none of these element can be construed as a "housing" as claimed by Applicant. Applicant's housing, for example, is broadly required to contain the motor (claim 1) and more narrowly to contain other drive elements such as the worm, worm gear, and spring (claims 35 and 36). Ehret does not show a housing, but Applicant's use of the term is much the same as that of Erices *et al.*, which shows drive housing 11, as described therein.

Ehret thus does not describe or suggest a worm gear that is biased against rotation from a first position to the second position by a spring connected between the gear and a housing as required by Applicant's claimed invention.

Further Ehret does not describe a spring that transfers stored energy, when the motor is powered down, to cause the gear powered by the motor to rotate in a direction opposite to the direction in which the motor drives the gear, as required by Applicant's invention. The gear of Ehret moves in only one direction, counterclockwise as described above.

There is thus no possible combination of Erices *et al.* and Ehret which leads to Applicant's invention as claimed.

The action of April 14, 2005 implies that Applicant's response of January 31, 2005 argued that no motivation exists only within Erices *et al.* to bias the gear against rotation. Applicant respectfully disagrees with this characterization of the argument submitted on January 31, 2005. Applicant merely stated that "there is no evident purpose to biasing the drive unit of Erices *et al.* against rotation". This lack of motivation includes all of the prior art of record and not just Erices *et al.* The action states that "Ehret *et al.* suggests the desirability of having a gear being biased against the rotation of the motor and the gear". However, as described above, Ehret teaches the use of stored energy for movement of cam 44 in the same direction as the gear driven by the

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motor. This is opposite to Applicant's invention in which the stored energy is used to reverse the direction of gear rotation.

Claims 35 to 44, new in the application, are submitted herewith for the Examiner's consideration. All of these claims are dependent claims, and insofar as the independent claims are considered allowable, so too should be these claims.

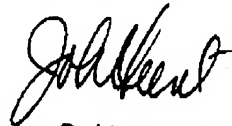
The claimed elements of each of claims 35 and 36 are shown in the drawings, particularly Figures 2, 7, and 8. Elements added in claims 37, 38, 39, 40, 41, 42, 43 and 44 are contained in claims 5, 6, 7, 10, 16, 18, 21 and 23, respectively. The requirement of claim 38 for the housing the be injection-molded is supported by paragraph 28 of the specification.

An Information Disclosure Statement will be separately submitted by Applicant.

In view of the above amendments and remarks, it is believed that the application is now in condition for allowance.

In the event that any official wishes to telephone, the call should be directed to the undersigned at (416) 865-8121.

Yours very truly,



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Date

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